

WHAT IS CLAIMED IS:
CLAIMS

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1. A preparation containing a water-soluble polymer or a water-dispersible polymer or a mixture of two or more thereof and filler particles, the filler particles being gypsum particles from waste-gas desulfurization plants (WDP gypsum particles) with a value for the particle size distribution x50 of 13 to 500 μm (as measured with a Sympatec Helos H0720 in isopropanol).
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2. A preparation as claimed in claim 1, characterized in that the value for the particle size distribution x50 of the WDP gypsum particles is 30 μm to 250 μm .
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3. A preparation as claimed in claim 1 or 2, characterized in that it contains WDP gypsum particles in admixture with at least one other type of filler particles.
4. A preparation as claimed in claim 4, characterized in that inorganic filler particles selected from the group consisting of chalk (CaCO_3), titanium dioxide, barium sulfate, silica flour, silica gel, dolomite or kaolin or a mixture of two or more thereof are present as the other type of filler particles.
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5. A preparation as claimed in any of claims 1 to 4, characterized in that a polymer selected from the group consisting of polyurethanes, polyacrylates, polymethacrylates, polyvinyl esters, polystyrenes, polybutadienes, polyamides, polyesters, polyvinyl chlorides, ethylene/vinyl acetate copolymers (EVA), styrene/butadiene copolymers (SBR), styrene/acrylonitrile polymers (SAN), styrene/acrylate copolymers or a mixture of two or more thereof is present as the water-soluble or water-dispersible polymer.
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6. A preparation as claimed in any of claims 1 to 5, characterized in that it contains at least 40% by weight of filler particles.
7. A preparation as claimed in any of claims 1 to 6, characterized in that it contains 50 to 99% by weight of WDP gypsum particles or a mixture containing WDP gypsum particles and at least one other type of inorganic
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filler particles, 1 to 50% by weight of polymer, 0 to 49% by weight of water and 0 to 49% by weight of other additives

8. A process for the production of a preparation containing a water-soluble polymer or a water-dispersible polymer or a mixture thereof and
5 WDP gypsum particles with a particle size x50 of 13 to 500 μm (as measured with a Sympatec Helos H0720 in isopropanol) or a mixture of WDP gypsum particles and at least one other type of inorganic filler particles, characterized in that at least one water-soluble polymer or at least one water-dispersible polymer or a mixture of two or more thereof or
10 an aqueous dispersion containing one or more such polymers is mixed with WDP gypsum particles having a particle size x50 of 13 to 500 μm (as measured with a Sympatec Helos H0720 in isopropanol) or a mixture of WDP gypsum particles and at least one other type of inorganic filler particles and optionally with water and one or more other additives in one
15 or more mixing steps in any order and with any time intervals between individual mixing steps.

9. The use of WDP gypsum particles having a x50 value of the particle size distribution of 13 to 500 μm (as measured with a Sympatec Helos H0720 in isopropanol) for the production of surface coatings, surfacing
20 compounds, sealing compounds, adhesives or moldings with a content of water-soluble or water-dispersible polymers.

10. The use claimed in claim 9, characterized in that the WDP gypsum particles have a x50 value for the particle size distribution of 30 to 250 μm .

11. The use of a mixture of inorganic filler particles containing WDP
25 gypsum particles with a x50 value for the particle size distribution of 30 to 250 μm and at least one other type of inorganic filler particles as a filler in polymer dispersions.

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